

# Chapter 15

## A Study on Entrepreneurship at the University of Valencia

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**Abstract** In the last few decades, there has been growing interest in the so-called third mission of universities, one of which, the question of entrepreneurship, will be highlighted in this paper. Hence, universities have been configured as institutions to proactively motivate their alumnae, and there, students will find an ideal environment in which to familiarize themselves with the skills and expertise that entrepreneurs require. Furthermore, universities provide advisory services as well as technical support, which are essential elements of sowing the seed of business startups. This chapter sets out, from a qualitative perspective, the policies, strategies and actions undertaken by the University of Valencia to encourage university entrepreneurship. It also includes the outcomes from the past year. We based our approach on the Comprehensive Model for University Entrepreneurship Encouragement, proposed by, with which we were able to describe the entire entrepreneurial process carried out by the University of Valencia in a logical order. This chapter contributes to existing literature by adding to the repertoire of papers to outline the entrepreneurial experiences of other universities. At the same time, it provides a guide for other academic institutions whose procedures are still in the early stages of design and implementation.

**Keywords** Business creation • Business development • Entrepreneurship • Higher education • Research • University of Valencia

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## 15.1 Introduction

Universities have traditionally been set up as institutions to serve a twofold purpose—higher education and research (Ortega y Gasset, 1930). Nevertheless, the concept has one major shortfall in that it does not fully respond to the needs of present day society, which ultimately benefits from university activities.

To alleviate for this shortfall, a new school of thought emerged, which, based on social demand, deals with the inadequacies of the traditional university system. In this regard, Sheen (1992), Gibbons, Limoges, Nowotny, Schwartzman, and Scott (1994), Ziman (1994), Slaughter and Leslie (1997) and Clark (1998); published the first papers on what would come to be known as the third mission of these institutions.

Currently, universities, as they adapt to the real needs of society, have incorporated this third mission, which is structured, in turn, into three parts: innovation, social commitment and entrepreneurship (Arocena & Sutz, 2001; Sánchez, Caggiano, & Hernández, 2011; Sutz, 2000).

As far as innovation is concerned, Etzkowitz (2002) points out, by way of the Triple Helix Model based on the reciprocal relationship between university, industry and government, that innovation must bolster the scientific advances made at universities, allowing, as such, for the development of new technologies that promote improvements to the economic system.

As far as social commitment is concerned, Stiles (2002) highlights the university and its relation to the social needs of its immediate environment. As for Corti and Riviezzo (2008), they understand this commitment to be a part of a strategy for organizational learning, and highlight the active relationships between the university and pertinent social agents.

And with regards to the third and final part of the third mission of universities, Clark (2004) describes the entrepreneurial university as a flexible organization that interacts with its social and economic environment, adapts to change and then looks for sources of funding to source and develop new innovations, until it reaches the stage where the marketing and exploiting of ideas occurs, and lastly, creates value in society.

According to Etzkowitz (2003), entrepreneurship is one of the fundamental missions of present-day universities, to such a degree that the author considers university entrepreneurship a “second academic revolution” following the unification of teaching and research. Similarly, Bueno (2007) points out that the approach that has had the greatest impact is that of the entrepreneurial university.

And it is precisely for this reason that this chapter focuses on the duality of the university and entrepreneurship. More specifically, the lines developed by the University of Valencia in its entrepreneurial approach.

The university dates back to 1499, and is one of the first to be founded in Europe. Since its inception, when only medicine, humanities, theology and law were taught, it has gradually increased the number of courses offered and currently boasts 20 faculty buildings providing more than 50 degree courses.

The University of Valencia is one of the most prestigious Spanish universities, and is ranked 4th out of a total of 60 universities in the ISSUE ranking of Spanish

public universities. At the same time, it is considered one of the top 500 universities in the world according to the top three international rankings, Shanghai, THE and QS. And lastly, it is also part of the EHEA (European Higher Education Area).

Against this backdrop, this chapter aims to describe and analyse the different lines developed by the University of Valencia in the field of entrepreneurship. To do this, we start from the Comprehensive Model to Encourage Entrepreneurship in Universities, proposed by Arroyo and Van der Sijde (2008), which provides a comprehensive perspective of the entrepreneurial process.

This chapter contributes by broadening the scope of the studies carried out on university entrepreneurship in general, and more specifically, and to the entrepreneurial policies of a particular university. In this paper, our intention is to disseminate the results based on the entrepreneurial initiatives implemented by the University of Valencia, so that, where possible, these can be of some use to other universities.

This chapter is structured as follows: the next section contains a comprehensive literature review, followed by a description and analysis of the mechanisms used by the University of Valencia to encourage and support entrepreneurship. Afterwards come the results and, lastly, the general outcomes, including the mechanisms to successfully overcome the challenges that entrepreneurship in the university environment implies.

## 15.2 The University of Valencia and Entrepreneurship

According to Salamzadeh, Salamzadeh, and Daraei (2011), “an entrepreneurial university is a dynamic system, which includes special inputs (Resources, Rules and regulations, Structure, Mission, Entrepreneurial capabilities, and Expectations of the society, industry, government and market), processes (Teaching, Research, Managerial processes, Logistical processes, Commercialization, Selection, Funding and financial processes, Networking, Multilateral interaction, and Innovation, research and development activities), outputs (Entrepreneur human resources, Effective researches in line with the market needs, Innovations and inventions, Entrepreneurial networks, and Entrepreneurial centers) and aims to mobilize all of its resources, abilities and capabilities in order to fulfill its Third Mission”

Etzkowitz (2004), for example, states that the entrepreneurial university has a “proactive stance in putting knowledge to use and in broadening the input into the creation of academic knowledge”.

In this section, therefore, we are going to examine to what extent the entrepreneurial culture at the University of Valencia, manifesting itself through policies and strategies, complies with the aforementioned definitions. To do so, we are going to follow the Comprehensive Model to Encourage Entrepreneurship in Universities, put forward by Arroyo and Van der Sijde (2008), which provides a comprehensive perspective of the entrepreneurial process.

**Table 15.1** Stages of the entrepreneurial process in universities

Stage	Action
Stage 1	Promote entrepreneurship
Stage 2	Support entrepreneurs
Stage 3	Support business creation
Stage 4	Support business development

*Source:* Created by the authors based on the paper by Arroyo and Van der Sijde (2008)

**Table 15.2** Agents from the University of Valencia involved in the entrepreneurial process

<i>Agents from the University of Valencia</i>
Research Results Transfer Office (OTRI)
Professional Insertion and Work Assessment Observatory (OPAL)
University Business Foundation (Adeit)
Information and Consumer Services for Students (SEDI)
University of Valencia Chairs
University of Valencia Science Park

*Source:* Compiled by the authors

According to the Model, the entrepreneurial process in universities comprises the following correlating stages, as seen below in Table 15.1.

Before examining the three support activities for entrepreneurial initiative at the University of Valencia, Table 15.2 contains the agents involved in each of the stages.

In the following section, and on the basis of the stages proposed by the Model put forward by Arroyo and Van der Sijde (2008), we are going to describe the main activities and objectives that are set for each of the agents within the University of Valencia that are involved.

### 15.2.1 Stage 1: Promote Entrepreneurship

The first policy involved with this stage of the process is raising awareness about entrepreneurship among academic staff, so that later, they are able to instil an entrepreneurial spirit and instruct students enrolled on the different University of Valencia degree courses.

With this in mind, the University of Valencia, through the University Business Foundation (Adeit), organizes a variety of different courses, summer school programmes, conferences and congresses to train teaching staff how to stimulate entrepreneurship in the classroom.

For example, at the last conference to be held, attendees debated the question of how best to generate entrepreneurial ideas, how to communicate and understand the entrepreneurial spirit and how to maximize creativity in the classroom environment.

Parallel to this, research is another of the factors taken into consideration in this stage and, in this regard, the University of Valencia boasts is held in high regard for its research activities, attested to by its 6th position (out of 59) in the ISSUE-P Research Ranking of Spanish Universities.

The last part of this stage is the teaching. In this regard, the University of Valencia provides three levels of entrepreneurial training: graduates, postgraduates and extra-curricular courses.

With regard to the degrees, one of the optional subjects is entitled Business Start-up (Creación de Empresas in Spanish), although not all degree courses have this option open to them, and furthermore, the subject has somewhat limited content and only accounts for six ECTS credits. We believe it would be in the interest of the University of Valencia to roll out this subject to more disciplines that might be of interest to the entrepreneur, while at the same time offering the subject to all graduates.

Nevertheless, the University of Valencia has a concentrated training provision for entrepreneurs, especially in its postgraduate courses. More specifically, it offers eleven Master's programmes, three diplomas and even specialized doctorate programmes in entrepreneurship and business creation.

Further to the entrepreneurial training, the different Chairs of the University of Valencia provide, via Adeit (University Business Foundation) extracurricular courses aimed at university students interested in entrepreneurship, and these have had an enthusiastic reception. Furthermore, the SEDI (Information and Consumer Services for Students) organizes workshops for non-university students interested in entrepreneurial pursuits.

### ***15.2.2 Stage 2: Support Entrepreneurs***

Arroyo and Van der Sijde (2008) define the start of this stage as the search for opportunities and as such, the University of Valencia acts as a Centre for the YUZZ—Young People with Ideas Programme. The programme, boasting the patronage of the Santander Bank, enjoys the collaboration of both public and private entities, and aims to encourage young people with an entrepreneurial spirit to enter their innovative ideas into a competition that is held.

On the whole, the University of Valencia participates in the organization of a variety of different competitions, the winners of which receive endowments, and as such promotes entrepreneurial opportunities and collaborates in the carrying out of the winning ideas.

The second part of this stage focuses on the Business Plan. OTRI (the Research Results Transfer Office) is the organization given the task of providing advice and tutoring the drafting of the Business Plan, accompanying the entrepreneur throughout the whole process.

This stage draws to a close with specific programmes that are aimed at providing entrepreneurs with a comprehensive understanding of all activities required to make a viable business based on a preconceived idea. In short, to come up with an idea that has a certain guarantee of success.

Along these lines, the University of Valencia organizes, takes part and administers a variety of different entrepreneurship programmes, such as the VLC/Campus Start-up Programme, aimed at supporting the creation of innovative knowledge-based start-ups; the Patent Pool Programme, the aim of which is to facilitate meetings between entrepreneurs, business owners and innovative knowledge generation centres; or the Young Entrepreneur Erasmus Programme, which provides transnational exchanges for fledgling entrepreneurs to learn from participating business owners in other countries.

### ***15.2.3 Stage 3: Support Business Creation***

This stage covers support activities for businesses during set up and adaptation to the market, and starts with the start-ups in the business incubators. In the case of the University of Valencia, these incubators are located in its Science Park, which is home to innovative, knowledge-based start-up companies.

The second part of this second stage contemplates access to commercial networks to build relationships between entrepreneurs, partners, clients and suppliers. To help deal with this particular activity, the University of Valencia, together with other universities, is part of the RedEmprendia network. This network boasts the patronage of the Santander Bank, and acts as a community of mentors and entrepreneurs.

Simultaneously, the OTRI boasts a major network of contacts, both domestic and international, such as the Transfer Network, OTRI Network, the European ASTP-Proton Network and the American AUTM Network; to name but a few.

And lastly, this stage includes access to funding. This is an essential question, as without proper funding, a business is unable to get started. OTRI therefore has, as one of its functions, the role of providing entrepreneurs with advice and guidance in their search for sources of funding so that spin-offs are able to incorporate themselves and thus get the business started.

Similarly, the OTRI administers the “Valora y transfiere” competitive call for projects, aimed at financing R&D activities with both market and knowledge-transfer potential, which are in their early stages of development, enabling as such the creation of new spin-offs within the University of Valencia.

Furthermore, the University of Valencia Science Park organizes the Capital and Science Forum, the aims of which is to connect entrepreneurs and investors interested in science- and technical-based business projects.

Other mechanisms for accessing funding are the different prizes and awards, for varying endowment amounts, which are organized and awarded by the University of Valencia in collaboration with different businesses and entities. Some of the many awards include the Motivem Prize, the Bancaja Young Entrepreneur Prize, and the Faculty of Economics’ Entrepreneur Award.

And lastly, it is worth noting that the University of Valencia was the first Spanish university to use crowd-funding as a tool to generate funds for entrepreneurs. Presently, access to this type of funding is carried out via the Uniempren Platform, under the auspices of the OPAL (Professional Insertion and Work Assessment Observatory), which is also used to search for business partners and private investors.

#### 15.2.4 Stage 4: Support Business Development

This stage comprises the monitoring of businesses created under the protection of the university. Monitoring consists of supervising the businesses during its early years, as well as providing support for its growth and consolidation. In the case of the University of Valencia, this function is assumed by the OTRI (Research Results Transfer Office), which is in charge of monitoring and providing support to spin-offs.

### 15.3 Results

The hard work carried out by the University of Valencia in its mission to promote entrepreneurship over the course of 2015 can be seen in the following results that appear in Table 15.3.

Of the total of 19 business start-ups, 32 % are by University of Valencia students, while the remaining 68 % comprised graduates.

Obviously, these results are possible thanks to the involvement and interaction of all the participating agents, but the main activity of the OTRI, whose success culminates with the creation of spin-offs, is of particular note. In this regard, the papers by O'Shea, Chugh, and Allen (2007) and Lockett and Wright (2005) conclude that the entrepreneurial expertise of the technicians from the OTRIs positively influence the number of spin-offs created.

**Table 15.3** Results for the University of Valencia in its entrepreneurship activities

Indicators	2015
No. of entrepreneurs attended to	639
No. of businesses attended to	148
No. of business plans developed	131
No. of businesses created	19
No. of training days	59
No. of networking actions	104

*Source:* Compiled by the authors based on data contributed by the OTRI

## 15.4 Conclusions

Universities these days are no longer institutions that merely provide support to students to secure employment in the current the job market, but rather assume the proactive function of instilling or strengthening the entrepreneurial spirit among students. In other words, they are no longer passive institutions but have become entities to stimulate entrepreneurship, and as such, promote self-employment and are therefore in line with the Entrepreneurship 2020 Action Plan.

The business idea is conceived by the entrepreneur, but universities have to help them to shape it, contributing the knowledge, tools and skills that entrepreneurs need to be able to put their ideas to work, as well as to consolidate them and reduce business failure due to ineffective management practices.

In our case study, we have been able to demonstrate that the University of Valencia has consolidated its position as an entrepreneurial university, since its activities comply with all the requisites of the Model put forward by Arroyo and Van der Sijde (2008), which defines the stages of the comprehensive process of university entrepreneurship.

Furthermore, it complies with the definition put forward by Salamzadeh et al. (2011) regarding the concept of the entrepreneurial university, so the University of Valencia therefore, appears as a dynamic system with the necessary inputs to be able to put its entrepreneurial activities into practice. At the same time, it achieves the desirable outputs, and lastly, achieves the goals that are expected of all consolidated entrepreneurial universities in compliance of its so-called Third Mission.

In conclusion, the University of Valencia fits the entrepreneurial university profile by meeting the criteria established in the five requisites outlined by Etzkowitz (2004): capitalisation and transmission of knowledge; interdependence of the entrepreneurial university, business and government; independence from other institutional entities; organizational hybridisation based on interdependence and independence, and lastly, reflexivity to renovate and adapt to the changes in the environment.

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